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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,372	04/14/2005	Florian Straub	1004501-000789	8782

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EXAMINER	
OKEKE, IZUNNA	

ART UNIT	PAPER NUMBER
2432	

NOTIFICATION DATE	DELIVERY MODE
07/21/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/510,372	STRAUB ET AL.	
	Examiner	Art Unit	
	IZUNNA OKEKE	2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 May 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-17,19-22 and 24-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-17,19-22 and 24-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-2, 4-17, 19-22 and 24-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-2, 4-12, 14-17, 19-22 and 24-28 rejected under 35 U.S.C. 103(a) as being unpatentable over Hanna et al. (WO-0172012), and further in view of Connery et al. (US-6606709).

a. *Referring to claim 1, 16 and 21:*

Regarding claim 1, 16 and 21, Hanna teaches a method for remotely controlling and/or regulating at least one system, comprising: generating a validation code having a limited period of validity, the validation code being variably generated to be valid only once for a communication to be dispatched, adding validity information to the validation code, which validity information defines the limited period of validity of the validation code (Page 7, Line 11-24, and Page 9, Line 3-13… authentication value as the validation code for authenticating messages sent between the system and the controller), combining information relating to the system and the validation code in accordance with a first combination rule (Page 7, Line 18-24…. combining information relating to the device and the authentication value), dispatching the

communication by a communication device assigned to the system, the communication comprising the information relating to the system, the validation code, and the validity information (Page 7, Line 18-24… the combined message/communication is transmitted to the device controller), and processing a message which the communication device receives after the communication has been dispatched, the processing comprising: extracting a check code from the message according to a first extraction rule, checking whether the message originates from a receiver of the communication based on the validation code and the check code (Page 14, Line 9-21… device checks the communication received from the controller using a hash of the message and the authentication device), and if the checking and the verifying are [[is]] successful, extracting instruction information according to the first extraction rule from the message and implementing the instruction information by the system (Col 14, Line 15-17… utilizing the message in the communication if the checking and validation is successful).

Hanna teaches the unique authentication value used in protecting and authenticating the messages transferred between the device and a remote device controller but does not teach a period of validity which is added to the authentication value and verifying whether the message is received within the validity period defined by the validity information . However, the use of one-time random numbers or nonce having a period of validity to protect messages transferred between two systems from replay attacks is well known in the art. For instance, Connery discloses a method of sending a boot message from a controller to a system wherein the message transmission is protected against replay using a random number which is valid within a time window appended to the message and wherein the message is verified against the defined period of validity (See Connery, Col 2, Line 37-43 and Col 8, Line 16-26). Therefore, one of ordinary

skill would have been motivated to modify Hanna's invention and use Connery's random token having a limited validity period as the authentication value and to also verify the received message against the validity period information defined in transmission for the purpose of protecting the messages from replay attacks.

a. *Referring to claim 2, 17 and 22:*

Regarding claim 2, 17 and 22, the combination of Hanna and Connery teaches the method as claimed in claim 1, wherein the adding of the validity information to the validation code comprises appending or prefixing the validity information to the validation code (See Connery, Col 2, Line 37-43 and Col 8, Line 16-26… timestamp window information added to the random number token indicating the time of validity for random number).

a. *Referring to claim 4, 19 and 24:*

Regarding claim 4, 19 and 24, the combination of Hanna and Connery teaches the method as claimed in claim 1, wherein the validation code is generated by a random number generator (See Connery, Col 2, Line 37-54…. random number).

a. *Referring to claim 5:*

Regarding claim 5, the combination of Hanna and Connery teaches the method as claimed in claim 1, wherein the validity information is directly added to the validation code (See the rejection in claim 2),

in the dispatching, the validation code is transmitted in an encrypted form, and after a decryption of the message or check code in the communications device, making the validity information available in plain text, wherein the validity information is not stored in the communication device (See Conner, Col 7, Line 37-40…. timestamp information in plain text).

a. *Referring to claim 6 and 7:*

Regarding claim 6 and 7, the combination of Hanna and Connery teaches the method as claimed in claim 1, comprising encrypting the validation code before the combination in accordance with the first combination rule (Page 10, Line 13-20 and Page 15, Line 9-18… encrypting the transmission comprising authentication value).

a. *Referring to claim 8, 20 and 25:*

Regarding claim 8, 20 and 25, the combination of Hanna and Connery teaches the method as claimed in claim 1, comprising: generating dispatcher information by the receiver of the communication, adding, by the receiver of the communication, the dispatcher information to the message which the receiver generates (Page 17, Line 1-12…. adding password information the communication to authenticate the device controller/receiver),

extracting the dispatcher information from the received message in accordance with a third extraction rule,

identifying the dispatcher based on the dispatcher information and stored dispatcher data,

if the checking, verifying, and identifying are successful, implementing the instruction information by the system, after the check code and dispatcher information have been extracted from the message, and if at least one of the checking, verifying, and identifying is not successful, ignoring the instruction information (Page 17, Line 1-12 and the rejection to claim 1…. authenticating the device controller based on the password added to the communication and only utilizing the message if the authentication value and authentication of the device controller is successful).

a. *Referring to claim 9:*

Regarding claim 9, the combination of Hanna and Connery teaches the method as claimed in claim 8, wherein the dispatcher information contains a secret password or a secret identification number (Page 17, Line 1-12.... password).

a. *Referring to claim 10 and 11:*

Regarding claim 10 and 11, the combination of Hanna and Connery teaches the method as claimed in claim 8, comprising transmitting the dispatcher information [[is]] in an encrypted form (Page 17, Line 1-12.... encrypted communication).

a. *Referring to claim 12:*

Regarding claim 12, the combination of Hanna and Connery teaches the method as claimed in claim 1, wherein the communication and/or message are encrypted (Page 15, Line 9-18.... encrypting the message).

a. *Referring to claim 14:*

Regarding claim 14, the combination of Hanna and Connery teaches the method as claimed in claim 1, wherein the message is received via the Internet (Page 10, Line 5-11.... communication received over the internet).

a. *Referring to claim 15:*

Regarding claim 15, the combination of Hanna and Connery teaches the method as claimed in claim 1, comprising: storing, when the communication is dispatched, a copy of the validation code so that the validation code is available for the checking when the message is received later, and storing the validity information is together with the validation code (Page 14-25 and the rejection in claim 1.... authentication value store for storing the authentication value used in making the comparison when a message is received from the device controller).

a. *Referring to claim 26, 27 and 28:*

Regarding claim 26, 27 and 28, the combination of Hanna and Connery teaches the method as claimed in claim 1, wherein the at least one system comprises an industrial system (Page 6, Line 9-14).

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hanna et al. (WO 01/72012) and Bird et al (US-5148479), and further in view of Silen et al. (US-2002/0045442).

a. *Referring to claim 13:*

Regarding claim 13, the combination of Hanna and Connery teaches the method as claimed in claim 1 wherein the communication is dispatched or received from one system to another (See Hanna, Page 6 and 7).

Hanna and Connery does not teach communication and/or the message are dispatched and/or received by means of short message service. However, Silen teaches a communication and/or the message are dispatched and/or received by means of short message service (See Silen, Abstract). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Hanna and Connery's means of dispatching and receiving control communications as a short message service as taught by Silen for the purpose of expanding the devices used in controlling the system such as the use of a mobile device from any location to control the system.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IZUNNA OKEKE whose telephone number is (571)270-3854. The examiner can normally be reached on 9:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

/IZUNNA OKEKE/
Examiner, Art Unit 2432

/Gilberto Barron Jr./
Supervisory Patent Examiner, Art Unit 2432